## Licensing and Technology Transfer Opportunity: Manipal University

Title of Technology Available: Interleukin 12 secreted by stimulated peripheral blood mononuclear cells (PBMC) clearly differentiates patients with intestinal tuberculosis (ITb) and Crohn's disease (CD).

Brief Description of Invention: Test to differentiate patients with intestinal tuberculosis and Crohn's disease

**Brief Background of Invention**: Intestinal tuberculosis is form of extra pulmonary tuberculosis which is often misdiagnosed as Crohn's disease. Diagnosis is made with the help of CT scan, Colonoscopy, histopathology, culture and PCR. Huge group of patients are misdiagnosed initially because it mimics other granulomatous colitis of intestine which has similar clinical presentation i.e. CD. Further research is required to prevent misdiagnosis.

**Describe the final product**: IL 12 levels secreted by PBMC stimulated with different test proteins clearly differentiate patients with ITb and CD and this characteristic has the potential for further development as a diagnostic test to differentiate the two conditions.

**Technological Domain** (Keywords): Intestinal tuberculosis, Crohn's disease, Cytokines, PBMC

## **Proof of Concept:**

PBMC isolated from active CD and proved ITB patients were stimulated with lipopolysaccharides from Escherichia coli (LPS) tuberculin purified protein derivative (PPD) and early secreted antigen target of 6 k Da (rdESAT-6) and compared the levels of secretion of Il 12 interleukin in CD and ITB

**Stage of Development**: Ideation/Prototype/Advanced Prototype/Market Ready product: Prototype (pilot data)

Provide Information on Competitors who manufacture and/or sell similar products: NIL

What are the unique advantages your innovation has compared to the competition? : NIL

Have you approached any company/industry to manufacture/license/and sell your invention? If yes, Provide details of the company/organization and the contact person: NO

Any other information that might be useful:

## **Intellectual Property Status:**

Indian Patent Application filed: Application no. 201641009687; dated 21-03-2016